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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/617,192	07/10/2003	Eric Bernier	15909ROUS02U	3526
34645	7590	06/27/2007		
JOHN C. GORECKI, ESQ. P.O BOX 553 CARLISLE, MA 01741			EXAMINER PHAN, TRI H	
			ART UNIT 2616	PAPER NUMBER
			MAIL DATE 06/27/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/617,192	<b>Applicant(s)</b> BERNIER ET AL.	
	<b>Examiner</b> Tri H. Phan	<b>Art Unit</b> 2616	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 July 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) 12-24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. <u>6/19/2007</u> . |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application   |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>7/10/2003</u> . | 6) <input type="checkbox"/> Other: _____.   |

## **DETAILED ACTION**

### ***Response to Communication(s)***

1. This Office Action is in response to the Application filed on July 10<sup>th</sup>, 2003. Claims 1-24 are now pending in the application. Per Election dated 6/19/2007, Applicants elected claims 1-11 for prosecution on the merits. Thus, non-elected claims 12-24 are withdrawn from consideration. In a response to this Office Action, Applicants should cancel the non-elected claims 12-24 to expedite the prosecution, should the response place the application in a favorable condition for allowance.

### ***Claim Objections***

2. Claims 2-4 are objected to because of the following informalities:

Regarding claim 2, line 2, the word "a" in front of "central office" should be changed to - the -- for clarity.

In regard to claim 3, line 2, the "a" in front of "central office" should be changed to -- the -- for clarity.

Regarding claim 4, line 2, the word "a" in front of "plurality of network access subscribers" should be changed to -- the -- for clarity.

### ***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

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3. Claims 1, 3-4 and 9-11 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 1, 3-4 and 9-11 are essentially directed to a “*set of program instructions*” (see Specification, page 10, lines 10-21), without a limitation to a practical application in the technological arts and is thus non-statutory for that reason(s).

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-5 and 7 are rejected under 35 U.S.C. 102(e) as being anticipated by **Johnson, Harold W.** (U.S.6,845,248; hereinafter refer as ‘**Johnson**’).

- Regarding claim 1, in accordance with **Johnson**’s reference (see figs. 1-5 and in the respective portions of the specification), **Johnson** discloses *a network device* (‘shared systems 270 in fig. 2, transceiver 401/402 in fig. 4’) *comprises*

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*control logic* ('control system 417/418' in fig. 4; for example see col. 6, lines 53-58)  
*configured to*

*interface with a central office* ('service provider 125/126' in figs. 1-2; for example see col. 5, lines 6-16);

*interface with a plurality of network access subscribers* ('modem 101/106' in figs. 1-2; for example see col. 4, lines 58-63); *and*

*interface with a wireless control unit* (for example see figs. 2 and 4; col. 7, lines 50-63).

- In regard to claims 2-3, **Johnson** further discloses, *an optical port configured to enable the network device to communicate with a central office over an optical communications link* (for example see fig. 2; col. 5, lines 26-29; wherein 'port' of the network wireless interface 276 connects to the service nodes 125/126 through connections 123/124, e.g. through line interface 411/412 in fig. 4, over optical network such as SONET, e.g. "*passive optical network*").

- Regarding claim 4, **Johnson** further discloses, *wherein the control logic is configured to interface with a plurality of network access subscribers by enabling the network device to operate as a digital subscriber line access multiplexer* (for example see figs. 2 and 4; col. 5, line 16 through col. 6, line 26; wherein the shared DSL access multiplexer in the shared system maps DSL connections to premise connection).

shared system 270 provides logical or spectral access for customers through

- In regard to claim 5, **Johnson** also discloses that the network device of claim 1 further comprising *at least one of an internal wireless antenna configured to receive and transmit wireless signals, and a port to enable the network device to be connected to an external wireless antenna* (for example see figs 2 and 4; where the transceiver 401/402 receives and transmits wireless signal through 'wireless port', and wherein "wireless antenna" is inherently in the transceiver 401/402 for receiving or transmitting wireless signal over free space).

- Regarding claim 7, **Johnson** further discloses that the network device of claim 1 further comprising *at least one of an infrared port to enable the network device to be interfaced via signals transmitted in an infrared portion of the spectrum, and an ultrasonic port to enable the network device to be interfaced via ultrasonic signals* (for example see col. 7, lines 41-49; wherein "infrared port" is inherently at the transceiver 401/402 in fig. 4, for receiving/transmitting infrared signals).

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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7. Claims 6 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Johnson, Harold W.** (U.S.6,845,248) in view of **Pience, Roger D.** (U.S.2002/0073434; hereinafter refer as '**Pience**').

- Regarding claim 6, **Johnson** does disclose in figs. 2 and 4, the method and system for exchanging communications between customers and service provider through wireless shared resource network via wireless interface as disclosed in part 5 above of this office action; but fails to explicitly disclose, wherein the network device is configured to provide network access to "*wireless subscribers*". However, such limitation lacks thereof from **Johnson** reference is well known and disclosed by **Pience**.

In an analogous art, **Pience** discloses the method and system for supporting broadband communications services; wherein the communications network interface unit 10 provides wireless services to wireless devices, e.g. "*wireless subscribers*" (for example see figs. 2-3; page 4, para [0048]).

Thus, it would have been obvious to those skilled in the art at the time of the invention was made to incorporate **Pience**'s wireless services into the **Johnson**'s wireless shared resource system, with the motivation being to provide the broadband wireless services to wireless devices.

- In regard to claim 11, **Johnson** fails to disclose "*emergency services*" provided by the wireless control unit to network access subscribers. However, such implementation is known in the art.

For example, **Pience** discloses about providing “*emergency services*” to subscribers (for example see page 1-2, para [0007], page 5, para [0052]).

Thus, it would have been obvious to those skilled in the art at the time of the invention was made to incorporate **Pience**’s emergency services into the **Johnson**’s wireless shared resource system, with the motivation being to provide emergency services to wireless devices.

8. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Johnson, Harold W.** (U.S.6,845,248) in view of **Voit et al.** (U.S.2002/0044567; hereinafter refer as ‘**Voit**’).

- In regard to claim 8, **Johnson** also fails to disclose that the network device of claim 1 further comprising “*a packet queue configured to store packets of data for transmission and a switch fabric configured to switch packets to the network access subscribers*”. However, such implementation is known in the art.

For example, **Voit** discloses a CPE/ATU-R device 1000 (“*network device*”; for example see fig. 10) *which further comprises a packet queue* (‘buffer 1006’ in fig. 10) *configured to store packets of data for transmission and a switch fabric* (‘router circuitry 1004’ in fig. 10) *configured to switch packets to the network access subscribers* (for example see page 19, paras [0185-0187]).

Thus, it would have been obvious to those skilled in the art at the time of the invention was made to implement **Voit**’s invention such as buffer and router circuitry into the **Johnson**’s shared premise wireless device, for performing functions such as determining which port to



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forward packets to destination and holding packet to prevent the loss while processing for routing.

9. Claims 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Johnson, Harold W.** (U.S.6,845,248).

- Regarding claims 9-10, **Johnson** does disclose different types of connections such as DSL connections 107-112 and SONET connection 123-124 are implemented in the system (for example see fig. 1, col. 3, lines 47-59; wherein, it is obvious that DSL connection and SONET connection are using different protocols for transporting data/service, e.g. "*first and second protocols*"; but fails to explicitly disclose about "*Ethernet*". However, Ethernet protocol is well known in the art for LAN connecting in telecommunication and **Johnson** also discloses that connection could use with different types of network communication technology (see col. 3, lines 56-59).

Therefore, it would have been obvious to those skilled in the art at the time of the invention was made to use "*Ethernet*" as preferred protocol for communicating with the service providers in the **Johnson's** system.

### ***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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**Chung et al.** (U.S.6,895,185) and **Chun et al** (U.S.2003/0226149) are all cited to show devices and methods for improving broadband services in telecommunication architectures, which are considered pertinent to the claimed invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tri H. Phan, whose telephone number is (571) 272-3074. The examiner can normally be reached on M-F (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi H. Pham can be reached on (571) 272-3179.

**Any response to this action should be mailed to:**

**Commissioner of Patents and Trademarks**

Washington, D.C. 20231

**or faxed to:**

**(571) 273-8300**

Hand-delivered responses should be brought to Randolph Building, 401 Dulany Street, Alexandria, VA 22314.

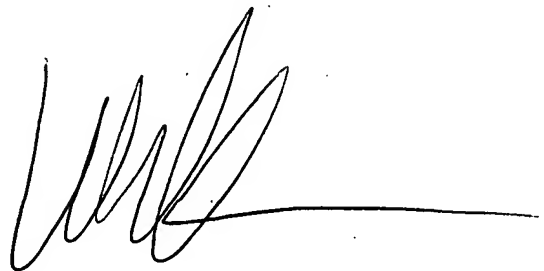
Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office, whose telephone number is (571) 272-2600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

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applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tri H. Phan  
June 21, 2007

A handwritten signature in black ink, consisting of stylized, overlapping loops and a long horizontal stroke extending to the right.

WELLINGTON CHIN  
PRIMARY PATENT EXAMINER